



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE           | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|----------------------|---------------------|------------------|
| 10/049,246  | 01/28/2002            | Jeffrey S. Hamilton  | T712-11             | 9406             |
| 27832 7590 12/19/2006 TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME 2003 SOUTH EASTON RD SUITE 208 DOYLESTOWN, PA 18901 |                       |                      | EXAMINER            |                  |
|   |                       |                      | CZEKAJ, DAVID J     |                  |
|   |                       |                      | ART UNIT            | PAPER NUMBER     |
|   |                       |                      | 2621                |                  |
| ,   |                       |                      | ·                   |                  |
| SHORTENED STATUTOR  | RY PERIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS  |                       | 12/19/2006           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  |  | Application No.   | Applicant(s)  |  |  |
|--|--|---|---|--|--|
|  |  | 10/049,246  | HAMILTON, JEFFREY S.                                |  |  |
|  | Office Action Summary  | Examiner  | Art Unit  |  |  |
|  |  | Dave Czekaj   | 2621  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |  |   |   |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |   |   |  |  |
| Status   |  |   |   |  |  |
| 2a) <u></u>  | Responsive to communication(s) filed on 16 O This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E  | action is non-final.  |   |  |  |
| Dispositi  | on of Claims   |   | •   |  |  |
| <ul> <li>4)  Claim(s) 1-3,5-8,10-13,15,25,31,32,34-37,41 and 45-50 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3,5-8,10-13,15,25,31,32,34-37,41 and 45-50 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>   |  |   |   |  |  |
| Application Papers   |  |   |   |  |  |
| 10) 🔲 .  | The specification is objected to by the Examine The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex | epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d). |  |  |
| Priority u   | nder 35 U.S.C. § 119   |   |   |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |  |   |   |  |  |
| Attachment   | (s)  |   |   |  |  |
| 1) Notice<br>2) Notice<br>3) Inform  | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) 'No(s)/Mail Date  | 4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:                                 | te  |  |  |

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/06 has been entered.

### Response to Arguments

Applicant's arguments with respect to the claims have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5, 7, 10-13, 31-32, 34, 35, 41, and 45-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara") in view of Robinett et al. (6351474), (hereinafter referred to as "Robinett").

Regarding claim 1, Tahara discloses an apparatus that relates to a coded stream-splicing device (Tahara: column 1, lines 10-12). This apparatus

Art Unit: 2621

comprises "computing a rate profile associated with a stream" (Tahara: column 12, lines 35-40, wherein the rate profile is the target bit rate), "compressing the digital media advertisement according to the computed rate profile" (Tahara: column 23, line 55 – column 24, line 10, wherein the digital media advertisement is the commercial, which is encoded according to the bit rate), and "inserting the compressed digital media advertisement in the stream at an advertising opportunity" (Tahara: column 24, lines 11-15, wherein the advertisement is the commercial which is spliced into the stream). However, this apparatus lacks the pre-designating as claimed. Robinett teaches that every program has a predetermined or pre-designated bit rate and is intended to be decoded at that bit rate (Robinett: column 6, lines 15-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the pre-designated bit rate taught by Robinett in order to prevent underflow and overflow conditions in the buffers.

Regarding claims 2 and 32, Tahara discloses "the rate profile is based on a predetermined bit rate" (Tahara: column 12, lines 35-40, wherein the rate profile is the target bit rate).

Regarding claim 3, Tahara discloses "the predetermined rate profile comprises a maximum bit rate" (Tahara: column 12, lines 60-65, wherein the maximum bit rate is the optimum bit rate).

Application/Control Number: 10/049,246

Art Unit: 2621

Regarding claims 5 and 34, Tahara discloses "the predetermined rate profile comprises a start and end point" (Tahara: column 13, lines 29-31, wherein the start and end point are included in the length of data).

Regarding claims 7 and 35, Tahara discloses "the rate profile comprises a time varying profile from the start point to the end point" (Tahara: column 13, lines 15-35, wherein each packet will contain different information and arrive/depart at different times making them time varying).

Regarding claims 10 and 31, note the examiners rejection for claim 1, and in addition, Tahara discloses determining a second bit rate profile for a second advertising opportunity" (Tahara: column 12, lines 4-6, wherein the second advertisement is the advertisements located on the plurality of channels).

Regarding claim 11, note the examiners rejection for claim 1.

Regarding claim 12, although not disclosed, it would have been obvious for the profile to supply the instantaneous sum of the first and second bit rate profile (Official Notice). Doing so would have been obvious in order to make the apparatus operate more efficiently by already knowing the sum of the bit rates, instead of calculating them.

Regarding claim 13, note the examiners rejection for claims 5 and 10.

Regarding claim 41, note the examiners rejection for claim 1, and in addition, Tahara discloses "a statistical multiplexor capable of determining an available bandwidth" (Tahara: column 12, lines 7-9).

Regarding claim 45, Robinett discloses "the pre-designated rate profile specifies the bit rate profile for a portion of the stream over a period of time" (Robinett: column 6, lines 15-25, wherein the portion of the stream is the program).

Regarding claim 46-48 and 50, Robinett discloses "the pre-designated rate profile is completed over a finite period of time" (Robinett: column 6, lines 15-25, wherein the processing is completed over time).

Regarding claim 49, Robinett discloses "the pre-defined advertisement profile specifies the bit rate for a time period of the advertising opportunity" (Robinett: column 6, lines 15-25, wherein the time period is specified by the time stamps).

Claims 8, 15, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara") in view of Robinett et al. (6351474), (hereinafter referred to as "Robinett") in further view of Seo et al. (6208688), (hereinafter referred to as "Seo").

Regarding claims 8 and 36, note the examiners rejection for claim 1, and in addition, claims 8 and 36 differ from claim 1 in that claims 8 and 36 further require the time varying profile to be modeled as a piecewise linear model. Seo teaches that a piecewise linear model can help prevent deterioration (Seo: column 9, lines 24-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the

Application/Control Number: 10/049,246

Art Unit: 2621

piecewise linear model taught by Seo in order to obtain an apparatus that provides the highest possible picture quality.

Regarding claim 15, Seo discloses "the first and second bit rate profiles have first and second high bit rate portions which are staggered" (Seo: figures 3A-3B, wherein the bit rates are shown to be staggered).

Claims 6, 25, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara") in view of Robinett et al. (6351474), (hereinafter referred to as "Robinett") in further view of Zhang et al. (6611624), (hereinafter referred to as "Zhang").

Regarding claim 6, note the examiners rejection for claim 1, and in addition, claim 6 differs from claim 1 in that claim 6 further requires the rate profile to include insertion instructions. Zhang teaches that using insertion instructions helps prevent buffer underflow (Zhang: column 12, lines 19-24, wherein the insertion instructions are the instructions on when either the null packets or stuffing bytes should be added to the stream). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the insertion instructions taught by Zhang in order to prevent buffer underflow situations.

Regarding claim 25, note the examiners rejection for claim 10, and in addition, Tahara discloses "encoding the advertisements at an aggregate bit rate profile which is less than or equal to the sum of the first and second profiles" (Tahara: column 12, lines 60-65, wherein the aggregate bit rate is the target bit

Art Unit: 2621

rate, wherein the sum of the first and second profiles or the stream does not exceed the transmission rate).

Regarding claim 37, Zhang discloses that "null cells are used to insure the minimum bit rate is achieved" (Zhang: column 12, lines 17-22, wherein the null cells are the null data).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/049,246

Art Unit: 2621

DJC

MEHRDAD DASTOURI SUPERVISORY PATENT EXAMINER TC 2600

Page 8